STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/578,521
Source: IFW
Date Processed by STIC: 5-17-06

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO **REDUCE** ERRORED SEQUENCE LISTINGS, **PLEASE** USE THE **CHECKER VERSION 4.4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<**http://www.uspto.gov/ebc/efs/downloads/documents.htm**> , **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. **Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):** U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 10/578,521

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1	Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2	Invalid Line Length	The rules require that a line **not exceed** 72 characters in length. This includes white spaces.
3	Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers; use **space characters**, instead.
4	Non-ASCII	The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please ensure your subsequent submission is saved in ASCII text.**
5	Variable Length	Sequence(s)____contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6	PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**
7	Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for **each** skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences.
8	Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If **intentional**, please insert the following lines for **each** skipped sequence. <210> sequence id number <400> sequence id number 000
9	Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of **n** or **Xaa**, and which residue **n** or **Xaa** represents.
10	Invalid <213> Response	Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence
11	Use of <220>	Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12	PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13	Misuse of n/Xaa	"n" can **only** represent a single nucleotide; "Xaa" can **only** represent a single amino acid

IFWP

RAW SEQUENCE LISTING DATE: 05/17/2006
PATENT APPLICATION: **US/10/578,521** TIME: 10:12:56

Input Set : **A:\50413.015001.txt**
Output Set: **N:\CRF4\05172006\J578521.raw**

3 <110> APPLICANT: Chun, Jong-Yoon
5 <120> TITLE OF INVENTION: Method for Amplifying Unknown DNA Sequence Adjacent to Known
6 Sequence
8 <130> FILE REFERENCE: 50413/015001
C--> 10 **<140> CURRENT APPLICATION NUMBER: US/10/578,521**
C--> 10 **<141> CURRENT FILING DATE: 2006-05-08**
10 <150> PRIOR APPLICATION NUMBER: PCT/KR2003/002407
11 <151> PRIOR FILING DATE: 2003-11-10
13 <160> NUMBER OF SEQ ID NOS: 28
15 <170> SOFTWARE: PatentIn version 3.3
17 <210> SEQ ID NO: 1
18 <211> LENGTH: 33
19 <212> TYPE: DNA
20 <213> ORGANISM: Artificial Sequence
22 <220> FEATURE:
23 <223> OTHER INFORMATION: DW-ACP1-A
26 <220> FEATURE:
27 <221> NAME/KEY: misc_feature
28 <222> LOCATION: (22)..(28)
29 <223> OTHER INFORMATION: n denotes deoxyinosine
31 <400> SEQUENCE: 1
W--> 32 **tcacagaagt atgccaagcg annnnnnnag gtc** 33
35 <210> SEQ ID NO: 2
36 <211> LENGTH: 33
37 <212> TYPE: ~~DNA~~
38 <213> ORGANISM: Artificial Sequence
40 <220> FEATURE:
41 <223> OTHER INFORMATION: DW-ACP1-C
44 <220> FEATURE:
45 <221> NAME/KEY: misc_feature
46 <222> LOCATION: (22)..(28)
47 <223> OTHER INFORMATION: n denotes deoxyinosine
49 <400> SEQUENCE: 2
W--> 50 **tcacagaagt atgccaagcg annnnnnncg gtc** 33
53 <210> SEQ ID NO: 3
54 <211> LENGTH: 33
55 <212> TYPE: DNA
56 <213> ORGANISM: Artificial Sequence
58 <220> FEATURE:
59 <223> OTHER INFORMATION: DW-ACP1-T
62 <220> FEATURE:
63 <221> NAME/KEY: misc_feature
64 <222> LOCATION: (22)..(28)

Does Not Comply
Corrected Diskette Needed

Pls explain Source of genetic material (Pg. 1-5)
Invalid Response

Pls explain Source of genetic material
Invalid Response

same error

↑ See item #11 on error summary sheet

RAW SEQUENCE LISTING DATE: 05/17/2006
PATENT APPLICATION: **US/10/578,521** TIME: 10:12:56

Input Set : **A:\50413.015001.txt**
Output Set: **N:\CRF4\05172006\J578521.raw**

Same errors

65 <223> OTHER INFORMATION: n denotes deoxyinosine
67 <400> SEQUENCE: 3
W--> 68 tcacagaagt atgccaagcg annnnnnntg gtc 33
71 <210> SEQ ID NO: 4
72 <211> LENGTH: 33
73 <212> TYPE: DNA
74 <213> ORGANISM: Artificial Sequence
76 <220> FEATURE:
77 <223> OTHER INFORMATION: DW-ACP1-G
80 <220> FEATURE:
81 <221> NAME/KEY: misc_feature
82 <222> LOCATION: (22)..(28)
83 <223> OTHER INFORMATION: n denotes deoxyinosine
85 <400> SEQUENCE: 4
W--> 86 tcacagaagt atgccaagcg annnnnnngg gtc 33
89 <210> SEQ ID NO: 5
90 <211> LENGTH: 33
91 <212> TYPE: DNA
92 <213> ORGANISM: Artificial Sequence
94 <220> FEATURE:
95 <223> OTHER INFORMATION: DW-ACP-2
98 <220> FEATURE:
99 <221> NAME/KEY: misc_feature
100 <222> LOCATION: (26)..(29)
101 <223> OTHER INFORMATION: n denotes deoxyinosine
103 <400> SEQUENCE: 5
W--> 104 tcacagaagt atgccaagcg aggggnnnng gtc 33
107 <210> SEQ ID NO: 6
108 <211> LENGTH: 33
109 <212> TYPE: DNA
110 <213> ORGANISM: Artificial Sequence
112 <220> FEATURE:
113 <223> OTHER INFORMATION: DW-ACP2-NA
116 <220> FEATURE:
117 <221> NAME/KEY: misc_feature
118 <222> LOCATION: (26)..(28)
119 <223> OTHER INFORMATION: n denotes deoxyinosine
121 <400> SEQUENCE: 6
W--> 122 tcacagaagt atgccaagcg aggggnnnag gtc 33
125 <210> SEQ ID NO: 7
126 <211> LENGTH: 33
127 <212> TYPE: DNA
128 <213> ORGANISM: Artificial Sequence
130 <220> FEATURE:
131 <223> OTHER INFORMATION: DW-ACP2-NC
134 <220> FEATURE:
135 <221> NAME/KEY: misc_feature
136 <222> LOCATION: (26)..(28)
137 <223> OTHER INFORMATION: n denotes deoxyinosine

See item #11 on error Summary Sheet.

RAW SEQUENCE LISTING DATE: 05/17/2006
PATENT APPLICATION: **US/10/578,521** TIME: 10:12:56

Input Set : **A:\50413.015001.txt**
Output Set: **N:\CRF4\05172006\J578521.raw**

same errors

```
     139 <400> SEQUENCE: 7
W--> 140 tcacagaagt atgccaagcg aggggnnncg gtc                          33
     143 <210> SEQ ID NO: 8
     144 <211> LENGTH: 33
     145 <212> TYPE: DNA
     146 <213> ORGANISM: Artificial Sequence
     148 <220> FEATURE:
     149 <223> OTHER INFORMATION: DW-ACP2-NT
     152 <220> FEATURE:
     153 <221> NAME/KEY: misc_feature
     154 <222> LOCATION: (26)..(28)
     155 <223> OTHER INFORMATION: n denotes deoxyinosine
     157 <400> SEQUENCE: 8
W--> 158 tcacagaagt atgccaagcg aggggnnntg gtc                          33
     161 <210> SEQ ID NO: 9
     162 <211> LENGTH: 33
     163 <212> TYPE: DNA
     164 <213> ORGANISM: Artificial Sequence
     166 <220> FEATURE:
     167 <223> OTHER INFORMATION: DW-ACP2-NG
     170 <220> FEATURE:
     171 <221> NAME/KEY: misc_feature
     172 <222> LOCATION: (26)..(28)
     173 <223> OTHER INFORMATION: n denotes deoxyinosine
     175 <400> SEQUENCE: 9
W--> 176 tcacagaagt atgccaagcg aggggnnngg gtc                          33
     179 <210> SEQ ID NO: 10
     180 <211> LENGTH: 33
     181 <212> TYPE: DNA
     182 <213> ORGANISM: Artificial Sequence
     184 <220> FEATURE:
     185 <223> OTHER INFORMATION: DW-ACP3-N1
     188 <220> FEATURE:
     189 <221> NAME/KEY: misc_feature
     190 <222> LOCATION: (22)..(25)
     191 <223> OTHER INFORMATION: n denotes deoxyinosine
     193 <400> SEQUENCE: 10
W--> 194 tcacagaagt atgccaagcg annnnggggg gtc                          33
     197 <210> SEQ ID NO: 11
     198 <211> LENGTH: 33
     199 <212> TYPE: DNA
     200 <213> ORGANISM: Artificial Sequence
     202 <220> FEATURE:
     203 <223> OTHER INFORMATION: DW-ACP3-N2
     206 <220> FEATURE:
     207 <221> NAME/KEY: misc_feature
     208 <222> LOCATION: (23)..(26)
     209 <223> OTHER INFORMATION: n denotes deoxyinosine
     211 <400> SEQUENCE: 11
```

RAW SEQUENCE LISTING DATE: 05/17/2006
PATENT APPLICATION: US/10/578,521 TIME: 10:12:56

Input Set : A:\50413.015001.txt
Output Set: N:\CRF4\05172006\J578521.raw

W--> 212 tcacagaagt atgccaagcg agnnnngggg gtc 33
215 <210> SEQ ID NO: 12
216 <211> LENGTH: 33
217 <212> TYPE: DNA
218 <213> ORGANISM: Artificial Sequence
220 <220> FEATURE:
221 <223> OTHER INFORMATION: DW-ACP3-N3
224 <220> FEATURE:
225 <221> NAME/KEY: misc_feature
226 <222> LOCATION: (24)..(27)
227 <223> OTHER INFORMATION: n denotes deoxyinosine
229 <400> SEQUENCE: 12
W--> 230 tcacagaagt atgccaagcg aggnnnnggg gtc 33
233 <210> SEQ ID NO: 13
234 <211> LENGTH: 20
235 <212> TYPE: DNA
236 <213> ORGANISM: Artificial Sequence
238 <220> FEATURE:
239 <223> OTHER INFORMATION: Nested DW-P3-N
241 <400> SEQUENCE: 13
242 ccaagcgagg gggggggtc 20
245 <210> SEQ ID NO: 14
246 <211> LENGTH: 29
247 <212> TYPE: DNA
248 <213> ORGANISM: Artificial Sequence
250 <220> FEATURE:
251 <223> OTHER INFORMATION: DW-P1-A
254 <220> FEATURE:
255 <221> NAME/KEY: misc_feature
256 <222> LOCATION: (22)..(24)
257 <223> OTHER INFORMATION: n is any base
259 <400> SEQUENCE: 14
W--> 260 tcacagaagt atgccaagcg annnaggtc 29
263 <210> SEQ ID NO: 15
264 <211> LENGTH: 29
265 <212> TYPE: DNA
266 <213> ORGANISM: Artificial Sequence
268 <220> FEATURE:
269 <223> OTHER INFORMATION: DW-P1-C
272 <220> FEATURE:
273 <221> NAME/KEY: misc_feature
274 <222> LOCATION: (22)..(24)
275 <223> OTHER INFORMATION: n is any base
277 <400> SEQUENCE: 15
W--> 278 tcacagaagt atgccaagcg annncggtc 29
281 <210> SEQ ID NO: 16
282 <211> LENGTH: 29
283 <212> TYPE: DNA
284 <213> ORGANISM: Artificial Sequence

same errors

RAW SEQUENCE LISTING DATE: 05/17/2006
PATENT APPLICATION: **US/10/578,521** TIME: 10:12:56

Input Set : **A:\50413.015001.txt**
Output Set: **N:\CRF4\05172006\J578521.raw**

Same errors

```
     286 <220> FEATURE:
     287 <223> OTHER INFORMATION: DW-P1-T
     290 <220> FEATURE:
     291 <221> NAME/KEY: misc_feature
     292 <222> LOCATION: (22)..(24)
     293 <223> OTHER INFORMATION: n is any base
     295 <400> SEQUENCE: 16
W--> 296 tcacagaagt atgccaagcg annntggtc                          29
     299 <210> SEQ ID NO: 17
     300 <211> LENGTH: 29
     301 <212> TYPE: DNA
     302 <213> ORGANISM: Artificial Sequence
     304 <220> FEATURE:
     305 <223> OTHER INFORMATION: DW-P1-G
     308 <220> FEATURE:
     309 <221> NAME/KEY: misc_feature
     310 <222> LOCATION: (22)..(24)
     311 <223> OTHER INFORMATION: n is any base
     313 <400> SEQUENCE: 17
W--> 314 tcacagaagt atgccaagcg annngggtc                          29
     317 <210> SEQ ID NO: 18
     318 <211> LENGTH: 29
     319 <212> TYPE: DNA
     320 <213> ORGANISM: Artificial Sequence
     322 <220> FEATURE:
     323 <223> OTHER INFORMATION: DW-P1
     326 <220> FEATURE:
     327 <221> NAME/KEY: misc_feature
     328 <222> LOCATION: (22)..(25)
     329 <223> OTHER INFORMATION: n is any base
     331 <400> SEQUENCE: 18
W--> 332 tcacagaagt atgccaagcg annnnggtc                          29
     335 <210> SEQ ID NO: 19
     336 <211> LENGTH: 21
     337 <212> TYPE: DNA
     338 <213> ORGANISM: Artificial Sequence
     340 <220> FEATURE:
     341 <223> OTHER INFORMATION: JYC3
     343 <400> SEQUENCE: 19
     344 tcacagaagt atgccaagcg a                                  21
     347 <210> SEQ ID NO: 20
     348 <211> LENGTH: 20
     349 <212> TYPE: DNA
     350 <213> ORGANISM: Artificial Sequence
     352 <220> FEATURE:
     353 <223> OTHER INFORMATION: mTNFa-C1
     355 <400> SEQUENCE: 20
     356 caccttgccc tgcccattag                                   20
     359 <210> SEQ ID NO: 21
```

See item #11 on error summary sheet.

The type of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/17/2006
PATENT APPLICATION: **US/10/578,521** TIME: 10:12:57

Input Set : **A:\50413.015001.txt**
Output Set: **N:\CRF4\05172006\J578521.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 22,23,24,25,26,27,28
Seq#:2; N Pos. 22,23,24,25,26,27,28
Seq#:3; N Pos. 22,23,24,25,26,27,28
Seq#:4; N Pos. 22,23,24,25,26,27,28
Seq#:5; N Pos. 26,27,28,29
Seq#:6; N Pos. 26,27,28
Seq#:7; N Pos. 26,27,28
Seq#:8; N Pos. 26,27,28
Seq#:9; N Pos. 26,27,28
Seq#:10; N Pos. 22,23,24,25
Seq#:11; N Pos. 23,24,25,26
Seq#:12; N Pos. 24,25,26,27
Seq#:14; N Pos. 22,23,24
Seq#:15; N Pos. 22,23,24
Seq#:16; N Pos. 22,23,24
Seq#:17; N Pos. 22,23,24
Seq#:18; N Pos. 22,23,24,25
Seq#:28; N Pos. 1,2,3,4,5,6

VERIFICATION SUMMARY DATE: 05/17/2006
PATENT APPLICATION: **US/10/578,521** TIME: 10:12:57

Input Set : **A:\50413.015001.txt**
Output Set: **N:\CRF4\05172006\J578521.raw**

L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:32 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:50 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:68 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:86 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:122 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:140 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:158 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:194 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:230 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
L:260 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:278 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:296 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0
L:314 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
L:332 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
L:458 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0